

improvement comprising a second screen lying on top of said first screen, said second screen having a significantly lower percentage of hole area, based on the total area of the second screen, than the percentage of hole area of said first screen, based on the total area of the first screen.

2. In a bushing for making fibers from a molten material comprising at least one sidewall and a tip plate or orifice plate through which molten material flows to form the fibers, and a screen having a plurality of holes therethrough and mounted on the interior of the bushing and spaced above the top of the tip plate or orifice plate, said screen having holes therein and being attached to said sidewall, the improvement comprises a generally mid or central portion of the screen having a hole area per unit area of screen that is significantly smaller than the hole area per unit area of screen of end portions of the screen on either side of the mid or central portion.

3. The bushing of claim 1 wherein said material is glass and said bushing, including the screen, is made from a precious metal or precious metal alloy with the major portion of said metal being platinum.

4. The bushing of claim 2 wherein said material is glass and said bushing, including the screen, is made from a precious metal or precious metal alloy with the major portion of said metal being platinum.

5. The bushing of claim 1 wherein the percentage of hole area in said second screen is at least 10 percent less, per unit area, than the percentage of hole area in said first screen.

6. The bushing of claim 5 wherein the percentage of hole area in said second screen is at least 20 percent less, per unit area, than the percentage of hole area in said first screen.

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7. The bushing of claim 6 wherein the percentage of hole area in said second screen is at least 30 percent less, per unit area, than the percentate of hole area in said first screen.

Sub 937  
8. The bushing of claim 2 wherein the hole area per unit area of screen in said central portion is at least 10 percent less than the hole area per unit area of said end portions.

9. The bushing of claim 8 wherein the hole area per unit area of screen in said central portion is at least 20 percent less than the hole area per unit area of said end portions.

10. The bushing of claim 9 wherein the hole area per unit area of screen in said central portion is at least 30 percent less than the hole area per unit area of said end portions.

11. A screen for a fiberizing bushing having a plurality of holes therethrough, said screen comprised of a mid or central portion and two end portion, said mid or central portion having a hole area per unit area of the central portion that is significantly less than the hole area of the end portions per unit area of the end portions.

12. The screen of claim 11 wherein said significantly less is at least 10 percent.

13. The screen of claim 12 wherein said significantly less is at least 20 percent.

14. The screen of claim 13 wherein said significantly less is at least 25 percent.

15. The screen of claim 14 wherein said significantly less is at least 30 percent.

16. A method of making fibers from a molten material wherein said molten material is heated in a bushing comprising at least one sidewall and a tip or orifice plate through which molten glass flows to form the fibers, and a first screen having a generally uniform hole size and density spaced above said tip plate, said first screen being attached to said sidewall, the improvement comprising using a second screen lying on top of said first screen, said second screen having a significantly lower percentage of hole area than the percentage hole area of said first screen.

Sub 967  
17. The method of claim 16 wherein said material is glass and said bushing is made from precious metal or alloys of precious metal containing a majority of platinum and wherein said significantly lower is at least about 10 percent lower.

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18. The method of claim 17 wherein said significantly lower is at least about 20 percent lower.

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19. The method of claim 18 wherein said significantly lower is at least about 30 percent lower.

20. The method of claim 16 wherein said bushing is used to make fibers having a smaller fiber diameter than the bushing containing said first screen was designed to make.

Sub 967  
21. A method for forming fibers from a molten material in a channel position of a multi-bushing fiberizing operation comprising at least one sidewall and a tip plate or orifice plate through which the molten material flows to form the fibers, and a screen spaced above said tip plate having a plurality of holes therein, said screen being attached to said sidewall, the improvement comprising a bushing screen in said bushing having a hole area per unit of screen area in a center portion of the screen that is significantly less than the hole area per unit of screen area in at least one end portion of the screen.

22. The method of claim 21 wherein the hole area per unit of screen area in the central portion of the screen is less than at least about 30 percent of the hole area per unit of screen area in said at least one end portion of said screen.

23. In a method for forming fibers from a molten material in a channel position of a multi-bushing fiberizing operation comprising at least one sidewall and a tip plate or orifice plate through which the molten material flows to form the fibers, and a conventional screen spaced above said tip plate and having a plurality of holes therein, the conventional screen being attached to said sidewall, the improvement comprising using a second screen having a hole diameter and/or hole density in the central portion of the screen that is significantly less than the hole diameter and/or hole density in the end portions of the screen lying on top of the conventional bushing screen.

24. The method of claim 23 wherein the hole size and/or hole density of said central portion of said second screen is such that the percentage of hole area in said central portion is at least about 10 percent less than hole area percent of the end portions.